

obvious over Musland-Sipper and Simpson and further in view of Bateman '756. Claims 6 and 7 stand rejected as allegedly being obvious over Musland-Sipper in view of Ray '322. Lastly, Claims 9-39 stand rejected as allegedly being obvious over Ray in view of Simpson and Bateman. These rejections are respectfully traversed.

Claim 1 of Applicants' invention relates to an apparatus for providing weather information onboard an aircraft, and includes a processor unit which processes weather information after it is received onboard the aircraft from a ground-based source containing a plurality of types of weather information, and a graphical user interface which provides a graphical presentation of the weather information to a user onboard the aircraft. As claimed, the graphical user interface includes a user selectable option that allows the user to request specific weather information for transmission from the ground-based source to the aircraft.

In Claims 6 and 8, an apparatus provides weather information onboard an aircraft, and includes a processor unit and a graphical user interface. These claims, like Claim 1, recite that the graphical user interface includes a user selectable option that allows the user to request specific weather information for transmission from the ground-based source to the aircraft. In Claim 6, the graphical user interface also provides a plan view of the weather information and the position of the aircraft to a user onboard the aircraft, and includes a user selectable option for centering the plan view on the position of the aircraft, even as the position of the aircraft changes. The graphical user interface in Claim 8 provides a plan view of the weather information for a selectable altitude to a user onboard the aircraft, and includes a user selectable option for changing the selected altitude.

Claim 9 relates to a method of providing convection information to an aircraft, and includes the steps of collecting convection information at a centralized data center, providing

a specific request from the aircraft for the convection information, and transmitting the convection information from the data center to an aircraft in response to the request.

The remaining independent claims, i.e., Claims 14, 19, 24, 28, 32 and 35, relate to a method of providing different types of weather related information to an aircraft. These claims include the step of providing a specific request from the aircraft for the information, and transmitting the information from the centralized data center to the aircraft in response to the request.

In Applicants' claimed invention, the user can request specific information to be transmitted from a ground-based source or a data center. In this way, information received onboard the aircraft can be specifically tailored to suit the user's needs.

The patent to Musland-Sipper relates to a system for communicating between an aircraft and a ground control station. A graphical interface is provided as an improved communication system between the aircraft and an air traffic control center (ATC). Conventionally, oral communication systems were used to communicate between the aircraft and the ATC.

In the graphical interface disclosed in Musland-Sipper, a REPORT/REQUEST menu 70, as shown in Figure 7, includes an actuating button 2L to bring up a "REQ WEATHER DEV" page. This allows the operator to request for a "weather deviation" up to a specified distance and in a given direction (see column 4, lines 24-27). In contrast to the assertion on page 2 of the Office Action, however, it is respectfully submitted that this "request" is not a request for specific information as recited in Applicants' claimed invention. As understood, the Musland-Sipper patent is lacking any details regarding the requested weather deviation and, it is

respectfully submitted, cannot be relied upon for a teaching of requesting specific weather information.

The Simpson patent relates to a system for providing weather information along a travel route. This patent was cited for its teaching of a ground-based source containing a plurality of types of weather information.

As discussed above, the Musland-Sipper patent is not understood to teach or suggest requesting specific weather information, but rather merely discloses allowing the operator to request for a weather deviation. Accordingly, it is respectfully submitted that, without impermissible hindsight, it would not have been obvious to modify the communication system of Musland-Sipper with the system in Simpson for providing weather information along a travel route.

Thus, reconsideration and withdrawal of the rejection of Claims 1, 3, 5 and 8 under 35 U.S.C. §103 is respectfully requested.

The tertiary citation to Tu relates to an apparatus for providing weather information onboard an aircraft, and was cited for its teaching of a graphical user interface with a user selectable option for displaying weather information in cross-sectional view along a route of the aircraft.

The Bateman patent relates to an aircraft weather information system and was cited for its teaching of providing convection, turbulence, and icing information.

Both Tu and Bateman, however, fail to compensate for the deficiencies in the proposed combination of Musland-Sipper and Simpson as discussed above with respect to Claim 1. Therefore, without conceding the propriety of combining the art in the manner proposed in paragraphs 4 and 5 of the Office Action, it is submitted that such combinations still fail to teach

or suggest Applicants' claimed invention. Accordingly, reconsideration and withdrawal of the rejection of Claims 2 and 4 under 35 U.S.C. §103 is respectfully requested.

The Ray patent relates to a cellular weather information system specifically for providing information on thunderstorms. With respect to Claims 6 and 7, this patent was relied upon for its teaching of disclosing a plan view of the weather information and position of the aircraft to an onboard user.

It is respectfully submitted, however, that the proposed combination of Musland-Sipper and Ray, even if proper, still fails to teach or suggest, among other features, a graphical user interface that allows the user to request specific weather information. As discussed above, Musland-Sipper is read to merely allow the operator to request for a weather deviation.

Accordingly, reconsideration and withdrawal of the rejection of Claims 6 and 7 under 35 U.S.C. §103 is respectfully requested.

With respect to Claims 9-39, it is respectfully submitted that it would not have been obvious to one skilled in the art to modify Ray in view of Simpson and Bateman as proposed in the Office Action. In Ray, a ground station detects electromagnetic radiation from thunderstorms (i.e., lightning), using a directional antenna such as a cross-loop configuration antenna or a flat plate antenna (see column 2, line 61 through column 3, line 1).

It is respectfully submitted, therefore, that Ray is not capable of providing a specific request from the aircraft for weather information. Thus, it would not have been obvious to modify Ray to include the weather information provided for by Simpson or the various weather information provided for by Bateman, without use of impermissible hindsight.

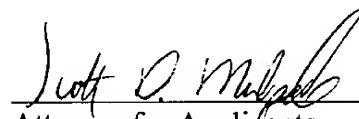
Accordingly, reconsideration and withdrawal of the rejection of Claims 9-39 under 35 U.S.C. §103 is respectfully requested.

Therefore, it is submitted that Applicants' invention as set forth in independent Claims 1, 6, 8, 9, 14, 19, 24, 28, 32 and 35 is patentable over the cited art. In addition, dependent Claims 2-5, 7, 10-13, 15-18, 20-23, 25-27, 29-31, 33, 34 and 36-39 set forth additional features of Applicants' invention. Independent consideration of the dependent claims is respectfully requested.

In view of the foregoing, reconsideration and allowance of this application is deemed to be in order and such action is respectfully requested.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to Honeywell's address given below.

Respectfully submitted,

  
\_\_\_\_\_  
Attorney for Applicants  
Scott D. Malpede  
Registration No. 32,533

HONEYWELL INTERNATIONAL INC.  
Law Department  
101 Columbia Road  
P.O. Box 2245  
Morristown, New Jersey 07962-2245

SDM:mm

DC\_MAIN 145847 v.1